

**Variation in behavioural traits within and between wild and captive-born
Vancouver Island marmots (*Marmota vancouverensis*)**

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Reintroduction and captive breeding programs have made the difference between survival and extinction for many species such as the Vancouver Island marmot (*Marmota vancouverensis*). The Vancouver Island marmot is Canada's most endangered mammal and in the early 2000s a captive-breeding and reintroduction program was initiated to prevent the species from going extinct and to restore wild populations. A major impediment limiting the success of the reintroduction program is the predation of reintroduced marmots. Previous studies have shown that captive-bred marmots suffer higher mortality rates due to predation than their wild-born counterparts. I tested for differences in risk-averse behaviour within and between wild-born and captive-bred marmots on Mount Washington (Vancouver Island, B.C.) to detect any behavioural deficiencies that may prove to be disadvantageous in the wild. I found no evidence that captive-bred marmots were less responsive to a potential predator than their wild-born counterparts ($U=29, n_{\text{captive}}=7, n_{\text{wild}}=9, p>0.83$). However, this may be due to habituation to human presence on Mount Washington, an alpine resort where human traffic is concentrated. Captive-bred males displayed larger exploratory ranges than captive-bred females ($\bar{x}_{\text{females}}= 5,144 \text{ m}^2 \pm 1,751 \text{ m}^2, \bar{x}_{\text{males}}= 193,657 \text{ m}^2 \pm 221,768 \text{ m}^2$), though these differences were not statistically significant ($U=0, n_{\text{females}}=2, n_{\text{males}}=3, p>0.20$). Large exploratory movements may place released animals at a greater risk of being predated upon thus future reintroductions could be improved by determining factors that may increase site fidelity.